



Maryland
Department of
the Environment

Report to the Legislature: Status of the State Coal Combustion By-Products Management Fund

FY 2021

Prepared for:
The Maryland General Assembly
Annapolis, MD

Bill Ferguson , Senate President
Maryland General Assembly

Adrienne A. Jones, House Speaker
Maryland General Assembly

Nov. 1, 2021

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard | Baltimore, MD 21230 | mde.maryland.gov
410-537-3314 | 800-633-6101 x3314 | TTY Users: 800-735-2258

TABLE OF CONTENTS

INTRODUCTION, BACKGROUND, AND SCOPE	2
STATUS OF THE FUND	3
USES OF THE FUND	4
CONCLUSION	5
TABLE I: CCB TONNAGES AND INVOICES CALENDAR YEAR 2020	6
TABLE II: FINANCIAL STATEMENT	7

INTRODUCTION, BACKGROUND, AND SCOPE

This report is submitted to the Maryland General Assembly to satisfy §9-285 of the Environment Article, Annotated Code of Maryland, which requires that the Maryland Department of the Environment (MDE) to inform the legislature about the status of the State Coal Combustion By-Products (CCBs) Management Fund (the Fund). Section §9-285 requires MDE to provide information on:

- (1) The status of the Fund;
- (2) Revenues and expenditures from the Fund;
- (3) The efficiency of the CCBs regulatory program;
- (4) Compliance rates within the regulatory program; and
- (5) Based on the factors listed in items (1) through (4) above, the necessity to review and adjust the fee in accordance with §9-283(g).

The purpose of the Fund is to provide MDE with the resources to oversee the disposal, beneficial use, and management of CCBs in the State of Maryland. These materials are the residuals created when coal is burned for energy. Coal consists of a large percentage of organic carbon, with a variable percentage of other naturally-occurring minerals that may contain a wide range of elements, including metals. A significant amount of volume reduction takes place when coal is burned, as a large percentage of the organic carbon in the coal is converted into carbon dioxide. Although largely derived from natural earth materials, including coal and limestone, CCBs can contain potentially harmful amounts of some heavy metals, such as mercury, lead, chromium, cadmium, selenium, molybdenum and boron. Although not acutely toxic or immediately hazardous, the concentrations of these chemicals can be harmful to plant and aquatic life and can render the air, surface water, and groundwater unhealthy for prolonged human exposure when not handled properly.

STATUS OF THE FUND

In accordance with state law, each year MDE must calculate a “generator fee” to charge the major CCB generators. This fee supports the state’s CCB regulatory activities and is based on the following factors:

- The requirements of the Code of Maryland Regulations (COMAR) 26.04.10.09;
- The amount of CCBs generated by each major generator, and the fate of those CCBs;
- The funding required to operate MDE’s CCB activities for a fiscal year; and
- The amount of money remaining in the Fund at the end of the previous fiscal year.

Revenues to the Fund. Under COMAR 26.04.10.09, CCB generators were required to submit a report detailing their CCB generation during CY19. These reports were due in March 2020. Based on the information contained in the reports, MDE developed fees for each site generating CCBs. In accordance with the regulation, MDE calculated an adjusted base fee of \$14.03645468 per ton of CCBs disposed in Maryland, and \$7.01822734 per ton for CCBs transported outside the state. Invoices were mailed to generators, and \$1,711,661.43 in revenues were collected to support the program. An adjusted balance of \$126,426.11 was remaining in the Fund at the end of FY20 (beginning of FY21)..

Expenditures from the Fund. A total of \$917,609.17 has been expended from the Fund in FY21. The expenditures were largely for salaries for staff, with the remainder to provide supplies needed to operate the program. A balance of \$920,478.37 was remaining in the Fund at the end of FY21.

Projected Costs for FY22. The anticipated costs to operate the program for FY22 are \$1,009,503.15. This amount has been appropriated in the FY22 budget. A balance of \$920,478.37 remained in the Fund at the end of FY21, which is required to be subtracted from the total amount billed for FY22 activities. This leaves \$89,024.78 as the total amount to be invoiced for CY20 CCBs generation, in order to cover FY22 costs.

Adjustments to the Base Fee. COMAR 26.04.10.09 provides that the base billing fee (subject to adjustment) is \$1.15 per ton of CCBs generated. The adjustment factors are 1 per ton for CCBs disposed of or used for non-coal mine reclamation in Maryland, and 0.5 per ton for CCBs transported outside the state. No fee is charged to generators for CCBs that are beneficially used, used for coal mine reclamation in Maryland, or to generators that generated less than 10,000 tons of CCBs per year. There were 18,949 billable tons of CCBs disposed of in state or transported outside the state. Further, MDE can adjust the base rate to accommodate anticipated expenditures. Based on the anticipated program needs and the amount of CCBs managed, MDE has calculated the base fee for this billing period (FY22) as \$4.69812549 per billable ton. MDE developed fees for each site generating CCBs, which are outlined in Table I. These fees are anticipated to generate ~\$89,025, which would leave no surplus to be carried over if all appropriated funds are expended. Any surplus or unexpended funds will be credited to the invoices in FY23.

If any generators question MDE’s assessments and MDE agrees with any of the claimed exemptions (e.g., for material that was really beneficially used, or used in coal mine reclamation, which are exempted from the fee by statute), the base fee may be subject to re-evaluation.

USES OF THE FUND

With the support provided by the Fund, MDE employs geologists, engineers, inspectors, and an Assistant Attorney General to focus on the management of CCBs in Maryland. The following is a description of the activities of MDE in FY21 that were supported by the Fund.

Review of engineering plans:

- Reviewed and approved ash storage site deconstruction plan for the inactive unlined Cell B Phases 2-5 at the Westland CCB Landfill (located in Montgomery County); and
- Reviewed Phase I permit modification application for the Fort Armistead Road – Lot 15 Industrial Landfill (located in Baltimore City).

Review of operational plans:

- Reviewed revised operations and maintenance manuals for the Westland (located in Montgomery County) and Brandywine (located in Prince George's county) CCB landfills;
- Reviewed water quality plan for Faulkner CCB Landfill (located in Charles County); and
- Reviewed environmental monitoring plan for the Westland and Brandywine CCB landfills.

Review of monitoring data:

- Performed hydrogeological evaluation of groundwater and surface water data collected as part of the Nature and Extent of Contamination Studies being conducted at the Brandywine and Westland CCB landfills; and
- Reviewed environmental monitoring data reports for the Westland, Brandywine and Faulkner CCB landfills.

Compliance activities:

- Performed inspections of CCB facilities, including inspections at the generating facilities, disposal sites, and mine reclamation sites.

Consent Decree:

- Revised consent decree for Westland, Brandywine and Faulkner CCB landfills.

Revising Maryland regulations governing CCBs:

- MDE hosted four workshop meetings with interested stakeholders on developing changes to Maryland regulations on the Management of Coal Combustion Byproducts under COMAR 26.04.10. MDE is revising the state CCB regulations to be consistent with the federal rule entitled "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities," which became effective on Oct. 19, 2015, and revised in 2018 with additional proposed changes pending. MDE has met routinely with the U.S. Environmental Protection Agency (EPA) to finalize Maryland's draft CCB regulations. The revised CCB regulations will be proposed following evaluation of the additional changes proposed by EPA; and
- MDE is revising the draft CCB beneficial use regulations. A draft is expected to be ready

for review by a stakeholder workgroup after promulgation of the revisions to the existing regulations.

CONCLUSION

The industry has increased its efforts to recycle CCB materials through mine reclamation and other means, and this trend is anticipated to continue. Further development of beneficial use regulations will provide the industry with additional acceptable ways of utilizing these materials, instead of disposing of them. The industry has already developed a number of successful ways to recycle these materials in building materials such as gypsum board and concrete. Therefore, any additional efforts will largely be supplementary.

EPA issued federal regulations governing CCBs that became effective on Oct. 19, 2015. In a few areas, these regulations are more stringent than Maryland's regulations. In response, MDE convened a workgroup to discuss the manner in which COMAR 26.04.10 can be amended to match the federal rule. This will allow generators and disposers of CCBs in Maryland to follow one set of rules in managing these materials. The workgroup met with a substantial degree of consensus. MDE has met routinely with EPA to finalize the draft CCB regulations. These regulatory changes are anticipated to be proposed in the second quarter of CY22, following departmental evaluation of changes to the 2015 federal regulations that were finalized in 2018, and additional changes proposed in 2019. A separate set of regulations, governing the beneficial reuse of CCBs, is being developed and is expected to be ready for review by a stakeholder workgroup following the promulgation of the amendments to the existing CCB regulations. Any changes can be assimilated into the beneficial use regulations as well.

TABLE I: CCB TONNAGES AND INVOICES CALENDAR YEAR 2020

Generators < 10,000 tons total generation are exempt

Name	Total Generation	In State Disposal	Out of State Disposal	Out of State Beneficial Use	Billable Tons	Adjusted Per Ton Fee	Invoice Amount:
Verso Corporation - Luke Paper Company	18,049	0	0	0	0		
AES Warrior Run	249,716	0	0	0	0		
Lanyard Power, LLC (Dickerson, Chalk Point and Morgantown)	111,623	2,570	7,195	0	6,167	\$4.69812549	\$28,973.34
Raven Power - Brandon Shores	95,537	7,279	4,475	6,530	12,782	\$4.69812549	\$60,051.44
Raven Power - H.A. Wagner	6,781	6,500	0	0	0		
Holcim (US) Inc.	*	0	0	0	0		
Lehigh Cement Company LLC	66,146	0	0	0	0		
Mettiki Coal, LLC	1,170	0	0	0	0		
Braddock M.S.	25	0	0	0	0		
Fort Hill H.S.	16	0	0	0	0		
Washington M.S.	14	0	0	0	0		
TOTAL:	549,077	16,349	11,670	6,530	18,949		\$89,024.78

Green	All generated CCBs reused beneficially
Red	Invoiced amount
Blue	Below 10,000 tons per year and exempt

Amt. Appropriated:
 \$1,009,503.1
 5
 Minus
 carryover:
 \$920,478.37
 Amount to be billed:
 \$89,024.78

Materials stored in 2019 and used in 2020 are included in the billable tonnage.

TABLE II: FINANCIAL STATEMENT

Beginning Fund Balance \$ 126,305.14
Prior Year Encumbrance \$120.97
Adjusted Beginning Balance **\$126,426.11**
Revenue **\$1,711,661.43**

FY2021 Expenditures	
Salaries	\$ 769,276.56
Communications	\$ 953.67
Travel & Training	\$ 760.85
Vehicles	\$ 24,725.62
Contractual Services	\$ 749.90
Supplies	\$ 0
Equipment (Computers)	\$ 0
Other	\$ 0
Total Direct Expenditures	\$ 796,466.60
Indirect Costs	\$ 121,142.57
Total Costs: direct + indirect	\$ 917,609.17

Balance in Fund 6/30/2021 \$ 920,478.37